

Chapter 4: Proofs with Triangles
Lesson 4-3: SSS, SAS, ASA
Homework

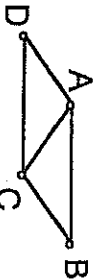
Name _____

#1

Given: $\overline{AB} \cong \overline{CD}$
 $\overline{BC} \cong \overline{DA}$
Prove: $\triangle ABC \cong \triangle CDA$

STATEMENTS

REASONS

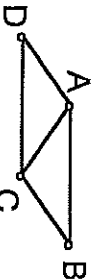


#2

Given: $\overline{AB} \parallel \overline{CD}$
 $\overline{BC} \parallel \overline{DA}$
Prove: $\triangle ABC \cong \triangle CDA$

STATEMENTS

REASONS

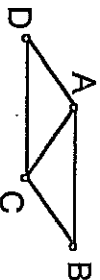


#3

Given: $\overline{AB} \parallel \overline{CD}$
 $\overline{AB} \cong \overline{CD}$
Prove: $\triangle ABC \cong \triangle CDA$

STATEMENTS

REASONS

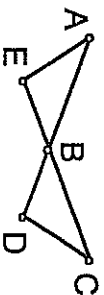


#4

Given: $\overline{AB} \cong \overline{CB}$
 $\overline{EB} \cong \overline{DB}$
Prove: $\triangle ABE \cong \triangle CBD$

STATEMENTS

REASONS

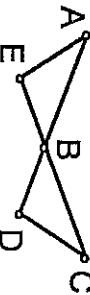


#5

Given: $\angle A \cong \angle C$
 $\overline{AB} \cong \overline{CB}$
Prove: $\triangle ABE \cong \triangle CBD$

STATEMENTS

REASONS

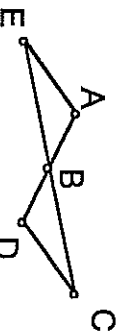


#6

Given: \overline{AD} bisects \overline{EC}
 \overline{EC} bisects \overline{AD}
Prove: $\triangle ABE \cong \triangle CBD$

STATEMENTS

REASONS



Geom

Name _____

1.

Given: \overline{AC} bisects $\angle BAD$
 $\overline{AB} \cong \overline{AD}$
 Prove: $\triangle ABC \cong \triangle ADC$

STATEMENTS

REASONS

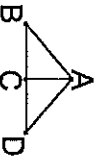


2.

Given: $\overline{AC} \perp \overline{BD}$
 $\overline{BC} \cong \overline{DC}$
 Prove: $\triangle ABC \cong \triangle ADC$

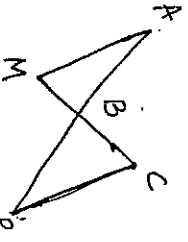
STATEMENTS

REASONS



3.

Given: $\overline{AM} \parallel \overline{CR}$, B is the midpoint of \overline{AC}
 Prove: $\triangle ABM \cong \triangle RBC$



Chapter: Proofs with Triangles
 Lesson: SSS, SAS, ASA, AAS, HL
 Classwork - proofs with more than four statements:

4.

Given: C is the midpoint of \overline{BD}
 $\overline{AB} \cong \overline{AD}$
 Prove: $\triangle ABC \cong \triangle ADC$

STATEMENTS

REASONS

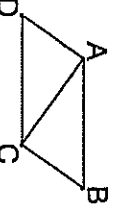


5.

Given: $\overline{AB} \parallel \overline{DC}$
 $\angle B \cong \angle D$
 Prove: $\overline{AD} \cong \overline{CB}$

STATEMENTS

REASONS



6.

Given: \overline{AD} bisects \overline{EC}
 $\angle A \cong \angle D$
 Prove: $\overline{AE} \cong \overline{DC}$

STATEMENTS

REASONS

